## <u>Dose-Response Correlation of</u> <u>Methadone and its Metabolite EDDP</u> <u>in Human Hair</u>

## **Fifth Technical Report**

(Time period covered: November 1 - December 31, 1995)

## Completion of the Second and Preparation of the Third Test Series

Analogous to the first test series, the following steps were undertaken with each of the subjects of the Methadone distribution center in Saarbruecken:

- a) Five sweat patches were applied and then removed after one, two, three, four, and six days, respectively. Contrary to the patients of Dr. Franta's practice, none of the subjects complained about allergic reactions or irritations. Yet, several of the sweat patches were lost, and a few subjects commented on poor adhesion of the patches to their skin.
- b) One strand of hair was bleached and simultaneously, another unbleached strand was removed as a reference. The bleaching procedure was performed with a conventional hair bleaching agent over a distance of at least 1 cm from the scalp. The bleaching agent was kept on the hair strand for 45 minutes and was then washed out with shampoo.
- c) After four weeks, the bleached hair strand as well as an unbleached hair strand (for reference) were removed.

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d) Blood was drawn right before the administration of Methadone. From one subject no blood could be drawn due to poor veins.

The hair strands were always removed using special scissors directly at the scalp.

The experience of the first test series was confirmed:

The clientele is rather unreliable. The foremost problem was the failure to stick to pre-arranged appointments, which resulted in a high expenditure of time at the practices and of mileage to the practices. Nevertheless, the subjects all stayed in the program until the end, which was not the case for the patients of Dr. Franta.

The expected number of 30 subjects was not obtained. The present subject number does not nearly suffice for a concluding study. Therefore we have established contacts with Methadone distribution centers in the neighboring cities of Pirmasens and Kaiserslautern, so as to enable the start of a third test series as quickly as possible.

The main emphasis of the next four weeks will be

a) the analysis of the second test series

as well as

b) the completion of the third test series.